

IN THE CLAIMS

1. (currently amended) An alkaline pH, free solution capillary electrophoresis process for analyzing a human biological sample comprising at least one serum protein constituent, selected from albumin, α_1 -globulin, α_2 -globulin, β -globulin, β_1 -globulin, β_2 -globulin and γ -globulin said method comprising: introducing the human biological sample into a capillary tube containing a buffer system, wherein said buffer system comprises a buffer and at least one additive having a hydrophobic interaction with said at least one protein constituent and providing said at least one protein constituent with at least one negative charge thereby modifying the electrophoretic mobility.
2. (original) The method of claim 1, which further comprises separating said at least one protein constituent by migrating and detecting said at least one protein constituent.
3. (canceled)
4. (currently amended) The method of claim 1, wherein the sample is bloodserum, hemolyzed blood, plasma, urine or cerebrospinal fluid.
5. (currently amended) The method of claim 1, wherein said at least one protein constituent is blood-serum protein.
6. (canceled)
7. (original) The method of claim 1, wherein said at least one additive comprises an anionic pole with a pH of more than 9 and a hydrophobic portion.
8. (currently amended) The method of claim 1, wherein ~~that~~ said additive comprises a hydrophobic portion composed of at least one linear or non linear alkyl chain containing 4 to 22 carbon atoms, and/or at least a combination of 1 to 10 aromatic or non-aromatic cycles, and an anionic pole constituted by one

or more groups selected from sulphonates, carboxylates, sulphates, phosphates and carbonates.

9. (currently amended) The method of claim 1, wherein said additive is selected from cholates, C₆ to C₂₂ alkyl-mono-, di- or tri-sulphonates, tetradecenesulphonate, naphthalenesulphonates, C₆ to C₂₂ alkymono-, di- or tri-carboxylates, C₆ to C₂₂ alkylcarboxysulphonates, naphthalenecarboxylates, C₄ to C₁₄ alkylsulphates, C₄ to C₁₄ alkylcarbonates, benzenesulphonates and benzenecarboxylates.

10. (original) The method of claim 1, wherein said additive is a C₆ to C₁₀ alkylsulphonate.

11. (original) The method of claim 1, wherein said additive is octanesulphonate.

12. (original) The method of claim 1, wherein said additive has a concentration in said buffer system in the range of 0.1 mM to 500 mM.

13. (original) The method of claim 12, wherein said additive in said buffer system does not exceed the critical micellar concentration of said additive in said buffer.

14. (original) The method of claim 1, wherein said additive has a concentration in the range of 1 mM to 4 mM in said buffer system.

15. (previously presented) The method of claim 1, wherein said additive has a concentration of about 2.5 mM in the buffer system.

16. (original) The method of claim 1, wherein said buffer system has a pH in the range 9 to 11.

17. (original) The method of claim 1, wherein the capillary tube is fused silica.

18. (original) The method of claim 1, wherein said buffer system further comprises at least one pH-modifying agent.

19. (currently amended) The method of claim 18, wherein the pH-modifying agent is selected from lithium hydroxide, sodium hydroxide, potassium hydroxide, rubidium hydroxide, ~~caesium~~cesium hydroxide, francium hydroxide, or a mono-, di-, tri- or tetra-alkyl ammonium hydroxide containing 1 to 8 carbon atoms in the alkyl portion.

20. (currently amended) A method for separating at least one protein constituent in a human biological sample comprising a serum protein selected from albumin, α_1 -globulin, α_2 -globulin, β -globulin, β_1 -globulin, β_2 -globulin and γ -globulin, said method comprising passing said at least one serum protein constituent into a capillary containing a buffer system comprising at least one further buffer and at least one additive having a hydrophobic interaction with human albumin.

21. (currently amended) A method of ~~for~~ electrophoretic separation from a human biological sample, by alkaline pH, free solution capillary electrophoresis, of serum protein constituents selected from albumin, α_1 -globulin, α_2 -globulin, β -globulin, β_1 -globulin, β_2 -globulin and γ -globulin in a liquid, human biological sample, said method comprising passing said at least one protein constituent into a capillary containing a buffer system further comprising a buffer and at least one additive, wherein said additive is a compound comprising an anionic pole with a pH of more than 9 and a hydrophobic portion.

22. (original) The method according to claim 1 or 20 or 21, wherein said buffer system further comprises sodium sulphate.

23. (original) The method according to claim 1, wherein said additive is a zwitterionic biological buffer.

24. (currently amended) A solution of a buffer system for capillary electrophoresis, which comprises in a liquid support and at least one buffer and an additive selected from cholates, linear C_6 to C_{22} alkyl-mono-, Li-di- or tri-sulphonates, tetradecenesulphonate, naphthalenesulphonates, C_6 to C_{22} alkylmono-, di- or tri-carboxylates, C_6 to C_{22} alkylcarboxysulphonates, naphthalenecarboxylates, C_4 to C_{14} alkylsulphates, C_4 to C_{14} alkylcarbonates, benzenesulphonates, and benzenecarboxylates that has a hydrophobic interaction with human albumin, said buffer system having a pH between 9 and 11.

25. (currently amended) A—The solution of claim 24, wherein said a buffer system for capillary electrophoresis, which comprises at least one buffer system and an additive selected from cholates, is a linear C_6 to C_{22} alkyl-mono-, di- or tri-sulphonates, tetradecenesulphonate, naphthalenesulphonates, C_6 to C_{22} alkylmono-, di- or tri-carboxylates, C_6 to C_{22} alkylcarboxysulphonates, naphthalenecarboxylates, C_4 to C_{14} alkylsulphates, C_4 to C_{14} alkylcarbonates, benzenesulphonates, and benzenecarboxylates comprising a hydrophobic portion composed of at least one linear or non linear alkyl chain containing 4 to 22 carbon atoms, and/or at least a combination of 1 to 10 cyclic aromatic groups or cyclic non aromatic groups, and an anionic pole comprising at least one group selected from sulphonates, carboxylates, sulphates, phosphates and carbonates, said buffer system having a pH of between 9 and 11.

26. (canceled)

27. (currently amended) The solution of claim 24, wherein that the additive is a linear C_6 to C_{10} alkylsulphonate.

28. (previously presented) The solution of claim 24, wherein said additive is octanesulphonate.

29. (currently amended) The solution of claim 25, wherein that the additive is a linear C_6 to C_{10} alkylsulphonate.

30. (previously presented) The solution of claim 25,
wherein said additive is octanesulphonate.

31. (canceled)

32. (canceled)

33. (previously presented) The solution of claim 25,
wherein said additive is a zwitterionic biological buffer.

34. (new) The method of claim 1, wherein said additive is
a linear C₆-C₁₀-alkylsulphonate.

35. (new) The method of claim 1, wherein said additive is
n-octylsulphonate.